Early follow-up visit at outpatient care after discharge improves 2-year heart failure readmission rate and long-term prognosis in patients with decompensated heart failure

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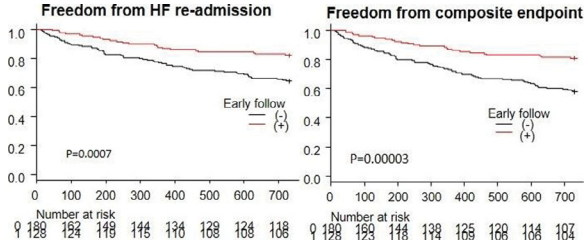
Background/Introduction: It has been reported that heart failure (HF) readmission has not declined even with current cardiology practice in the last 10 years. It has been also reported that HF readmission tends to occur shortly after discharge. This may be due to overwork and excessive salt intake after discharge. In other words, it is conceivable that patient factors are largely attributable, which should be intervene for better clinical outcomes.
Purpose: We hypothesized and investigated whether an early follow-up visit at outpatient care within 2 weeks after discharge affects the readmission rate and prognosis in patients with decompensated HF.
Methods: We retrospectively investigated consecutive 407 hospitalized patients due to decompensated HF. After exclusion of 99 patients with in-hospital death, transfer to another hospital and readmission within 2 weeks after discharge, consecutive 308 out of 407 patients were investigated. Two-year clinical outcomes after discharge were collected and analyzed. An early follow-up was defined as an outpatient care visit within 2 weeks after discharge with the adjustment of drugs and/or the lifestyle guidance, if necessary. A setting of early follow-up in each patient was according to a physician's discretion.
Results: One hundred-twenty eight patients underwent early follow-up visits and other 180 patients were without it. An univariate analysis showed that the early follow-up was significantly associated with a lower HF readmission rate during 2 years (17.1% in the early follow-up group, 34.4% in the control group, $p \leq 0.001$, OR=0.397, 95% CI=0.230–0.685, Figure) and a 2-year composite adverse outcome (all cause death and HF readmission; 18.7% vs. 40.5%, $p < 0.001$, OR=0.332, 95% CI=0.196–0.563, Figure). To exclude possible relationships of other co-variable factors, we performed a multivariate analysis about the association with HF readmission rate and the 2-year composite adverse outcome (co-variate factors as follows are included; factors of which p-value was less than 0.1 and general confounding factors). The multivariate analysis showed that the early follow-up was independently associated with HF readmission during 2 years (p=0.002, OR=0.376, 95% CI=0.197–0.716) and the 2-year composite outcome ($p < 0.001$, OR=0.343, 95% CI=0.182–0.648). Finally, we characterized the practical interventions at outpatient care after discharge. Lifestyle guidance was done in all patients. However, medication adjustments were done in only 36.7% patients. Interestingly, whether or not a medication adjustment was done at the early follow-up visit was not associated with the HF readmissions (p=0.781).
Conclusions: The present study suggests that an early follow-up approach after discharge in decompensated HF patients may improve the long-term prognosis. These results were not dependent on whether a medication adjustment was performed or not. An early follow-up may help improve patient factors of HF worsening.



Main results